By ROBERT B. LEFTWICH
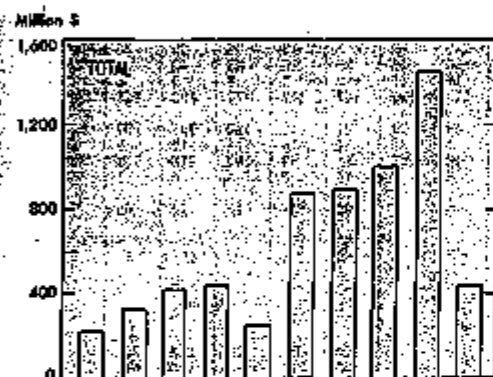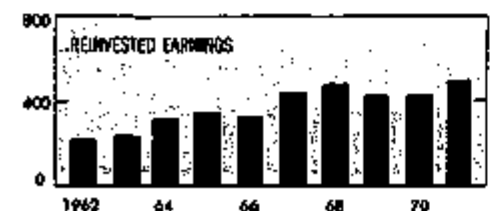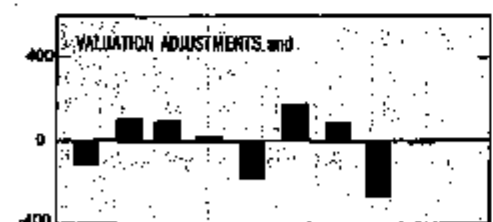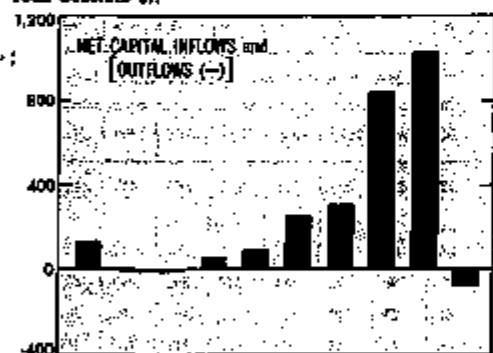
Foreign Direct Investments in the United States, 1962-71

CHART 14

Annual Additions to Foreign Direct Investments in the United States

Million $

Total Consists of:

NET CAPITAL INFLOWS and [OUTFLOWS (−)]

VALUATION ADJUSTMENTS and

REINVESTED EARNINGS

1962   64   66   68   70

U.S. Department of Commerce, Bureau of Economic Analysis

THIS article presents annual data on foreign direct investments in the United States for the 1962-71 period. Breakdowns, by country and by industry, of the value of foreign direct investments, net capital inflows, earnings, reinvested earnings, and income paid out in the form of dividends, interest, and branch earnings are shown in tables 1 and 2. (These items are defined either in the text or in the Technical Note at the end of the article.) More detailed country by industry data are presented in tables 5 and 6. This is the first time since the 1962 publication of *Foreign Business Investments in the United States*[1] that such detailed information has been made available. That report presented data for the 1950-61 period.

The data presented in this article are based on a sample of approximately 400 of the larger foreign-owned U.S.

firms.[2] The sample has been matched against the 1959 benchmark universe of foreign direct investments in the United States, and sample data on earnings, reinvested earnings, income paid out, and the value of foreign direct investments in the United States have been blown up to universe estimates for each of the years presented. The data on net capital inflows, however, are as reported by the 400 companies. Since the benchmark is out of date, the universe estimates are subject to a significant margin of error; a new benchmark survey is planned as resources become available.

This article is in two parts. The first part summarizes trends in foreign direct investments and in earnings on such investments during the past decade. The second part presents the results of an empirical investigation of the determinants of foreign direct investment in the United States.

Highlights of the Past Decade

Growth of foreign direct investments

As chart 14 shows, the annual change in the value of the foreign direct investment position in the United States is the sum of net capital inflows, valuation adjustments of the foreign share of assets held by U.S. affiliates of foreign firms, and the foreign share of reinvested earnings of incorporated U.S. affiliates. The value of foreign

direct investments in the United States increased substantially in the 1962-71 period, from $7.4 billion at yearend 1961 to $13.7 billion at yearend 1971. The rate of growth showed a marked increase after 1966: From yearend 1961 to yearend 1966, foreign direct investments grew an average $332 million per year, while from yearend 1966 to yearend 1971, they grew an average $930 million per year. These figures correspond to annually com-

[1]. Samuel Pizer and Zalie Warner, *Foreign Business Investments in the United States*, Office of Business Economics (now Bureau of Economic Analysis), 1962.

[2]. Foreign-owned U.S. firms include all U.S. firms in which a foreign person or organization holds 25 percent or more of the voting stock or an equivalent interest.

pounded growth rates of 4.1 percent and 8.6 percent, respectively.

In 1971, however, the value of foreign direct investments in the United States rose only $434 million or 3.3 percent. This relatively small increase resulted from developments in the second and third quarters of the year, when there was widespread anticipation that a number of leading currencies would appreciate against the dollar. As a result, there was a large outflow

Table 1.—Foreign Direct Investments in the United States, Selected Data Items, by Country and by Industry

[Millions of dollars]

Area and industry	Value of foreign direct investments at yearend										Earnings [1]									
	1962	1963	1964	1965	1966	1967	1968	1969	1970 r	1971 p	1962	1963	1964	1965	1966	1967	1968	1969	1970 r	1971 p
Total	7,612	7,944	8,363	8,797	9,054	9,923	10,815	11,818	13,270	13,704	359	436	504	642	635	704	644	634	854	1,110
By area:																				
Canada	2,064	2,183	2,284	2,388	2,439	2,575	2,659	2,834	3,117	3,339	90	114	109	135	133	146	153	122	93	218
Europe	5,247	5,492	5,820	6,078	6,274	7,006	7,750	8,510	9,553	10,077	267	320	382	484	541	543	447	658	591	757
United Kingdom	2,474	2,685	2,796	2,853	2,964	3,156	3,409	3,496	4,127	4,435	102	142	187	214	234	257	271	273	200	380
European Economic Community	1,675	1,728	1,841	1,975	2,144	2,405	2,790	3,306	3,555	3,757	165	120	141	176	199	254	285	259	240	274
Belgium and Luxembourg	156	161	175	175	162	223	273	309	335	341	3	9	6	4	0	33	22	19	24	22
France	153	122	107	200	215	265	288	319	286	315	4	6	12	7	10	26	23	35	17	21
Germany	182	149	156	209	247	318	337	617	680	767	6	10	14	16	10	30	43	22	34	55
Italy	100	102	82	87	87	86	93	94	100	100	-10	-13	-11	-2	1	8	5	8	9	-1
Netherlands	1,082	1,134	1,231	1,304	1,442	1,506	1,750	1,966	2,151	2,238	163	113	120	147	183	177	192	185	167	176
Other Western Europe	1,096	1,090	1,183	1,249	1,266	1,444	1,551	1,708	1,372	1,885	60	58	74	94	115	122	131	127	152	133
Sweden	179	185	190	215	217	339	208	190	249	229	6	5	9	13	18	14	15	9	12	10
Switzerland	836	825	896	940	949	1,006	1,239	1,305	1,545	1,537	53	49	63	71	89	102	112	118	135	116
Other	83	89	88	94	100	100	106	114	119	120	1	3	2	10	8	6	6	1	5	6
Japan	112	104	72	118	103	109	181	176	220	-174	-3	4	7	22	14	12	28	41	71	92
Latin America and other Western Hemisphere	162	123	145	172	195	193	183	103	248	315	5	-2	6	2	8	2	(*)	11	17	36
Other	27	42	42	43	43	43	42	105	121	146	(*)	1	1	-1	-1	1	3	2	13	6
By industry:																				
Petroleum	1,419	1,512	1,612	1,710	1,760	1,835	2,251	2,463	2,982	3,113	196	158	172	215	214	237	263	319	215	202
Manufacturing	2,585	3,018	3,213	3,478	3,789	4,181	4,475	5,344	6,140	6,748	146	197	235	302	357	330	410	414	399	512
Trade	750	706	673	742	730	849	939	980	004	568	10	11	41	66	43	70	91	88	119	130
Insurance	1,940 [2]	2,045 [2]	2,151 [2]	2,160 [2]	2,198 [2]	2,315 [2]	2,189 [2]	2,256 [2]	2,352 [2]		52	55	39	60	75	85	73	76	81	166
Other finance	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	135	16	12	11	7	23	39	44	46	82
Other	615	662	582	692	714	816	836	633	888	693	1	4	5	7	-2	9	3	-6	-6	18

Area and industry	Reinvested earnings										Interest, dividends, and branch earnings [1]									
	1962	1963	1964	1965	1966	1967	1968	1969	1970 r	1971 p	1962	1963	1964	1965	1966	1967	1968	1969	1970 r	1971 p
Total	214	256	327	368	339	440	458	431	434	406	185	223	302	268	371	381	399	417	441	628
By area:																				
Canada	56	96	41	48	50	80	102	84	52	187	45	65	68	94	77	64	64	47	39	88
Europe	150	174	257	285	246	362	371	318	390	292	182	147	123	102	204	287	308	168	368	456
United Kingdom	44	77	95	91	102	122	206	107	134	104	63	67	73	138	125	134	163	159	164	236
European Economic Community	75	88	115	141	105	148	173	130	117	140	40	28	31	35	35	117	111	122	132	134
Belgium and Luxembourg	2	6	6	7	8	17	10	17	23	20	4	3	3	3	2	8	5	6	9	3
France	3	3	7	6	7	16	13	14	8	11	4	4	5	2	3	12	11	12	9	10
Germany	9	6	11	11	11	16	36	13	16	39	4	2	3	4	7	14	7	10	13	19
Italy	-11	-13	-11	-2	1	6	4	6	3	-4	2	2	1	(*)		2	1	3	5	5
Netherlands	72	55	103	120	78	93	109	81	67	76	25	27	19	20	73	80	87	101	96	97
Other Western Europe	40	14	47	53	38	52	90	81	68	49	30	43	29	42	73	46	46	67	67	96
Sweden	3	4	7	10	10	7	4	2	4		3	(*)	2	3	7	7	7	6	7	11
Switzerland	34	8	37	37	28	71	81	78	60	46	26	40	26	34	64	36	39	40	58	83
Other	3	2	3	5	6	4	5	(*)	4	1	(*)	3	(*)	5	2	3	2	2	2	2
Japan	-4	2	5	14	6	7	18	29	54	53	4	4	4	10	7	8	13	0	17	40
Latin America and other Western Hemisphere	1	-4	4	-1	6	2	(*)	(*)	-4	8	2	3	2	2	2	2	(*)	12	22	29
Other	2	-2	-1	2			2	(*)	18	7	(*)	1	1	(*)	1	1	1	1	(*)	(*)
By industry:																				
Petroleum	118	138	154	154	124	187	143	90	95	73	14	17	18	26	31	90	109	124	119	116
Manufacturing	68	86	126	129	200	255	280	278	255	318	76	122	106	176	159	122	187	149	162	217
Trade	15	7	34	43	30	42	57	62	29	71	3	5	9	25	11	28	25	21	28	53
Insurance											68	48	38	40	70	85	72	75	81	166
Other finance	-2	5	4	6	-5	10	13	14	16	96	36	14	12	12	22	20	29	29	40	39
Other	-3		-3	-5	-10	-4	-5	-11	-11	5	18	16	10	20	18	26	16	12	10	14

from the United States of foreigners' direct investment capital to Japan and a smaller but nevertheless substantial flow to Switzerland. The capital out- flow to Japanese parent firms arose from prepayment for imports by their U.S. trading company affiliates, while the flow to Switzerland apparently took the form of an accelerated repay- ment of credit extended by Swiss parents of two U.S. manufacturing affiliates. Leaving aside these two

Table 2.—Net Capital Inflows to Foreign Direct Investments in the United States, by Country and by Industry

[Millions of dollars; outflows (−)]

Area and industry	1962			1963			1964			1965			1966		
	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other
Total	132	38	95	−5	161	−166	−5	71	−75	57	100	−44	86	89	−4
By area:															
Canada	43	7	36	44	32	11	20	8	17	43	58	−16	3	25	−23
Europe	62	29	34	−17	98	−115	−12	50	−70	−43	87	−80	90	61	29
United Kingdom	19	2	18	44	36	7	−30	33	−60	−56	11	−77	23	19	4
European Economic Community	46	24	22	−32	42	−74	−4	14	−18	10	20	−9	67	43	23
Belgium and Luxembourg	5	3	2	−2		−2	8		8	−7	1	−8	10		10
France	7	14	−7	−5	1	−6	8	3	5	(*)	1	−2	8	3	5
Germany	31	2	29	−9	1	−10	−5	5	−10	43	14	29	28	36	−8
Italy	22	4	18	19	25	−6	−9	2	−11	7	3	4	1	1	(*)
Netherlands	−19	1	−20	−35	15	−50	−5	4	−10	−33		−52	20	3	16
Other Western Europe	−3	3	−6	−29	20	−49	28	12	16	13	6	7	1	(*)	1
Sweden	1	(*)	(*)	(*)		(*)	7	10	−3	6		6	−7	(*)	−7
Switzerland	−7	3	−10	−32	20	−52	24	2	22	6	6	(*)	7	(*)	7
Other	3		3	3		3	−2	(*)	−3	1		1	1		1
Japan	24		24	−10	21	−31	−28	3	−40	33	2	31	−24	3	−27
Latin America and other Western Hemisphere	27	3	24	−32	5	−37	18	1	17	30	4	26	17		17
Other	−34	−1	−33	10	−5	15	1	1		−6	−1	−5	1		1
By industry:															
Petroleum	−99		−90	−44	20	−65	−55	1	−56	−63		−63	−94	1	−95
Manufacturing	41	27	14	42	63	−22	59	45	15	133	75	36	111	47	64
Trade	83	4	79	−61	3	−63	−65	4	−69	30	10	20	−39	9	−48
Insurance	36		35	−37		−37	−1		−2	−20		−18	64		65
Other finance	11	6	5	37	30	8	34	5	29	−37	11	−48	18	0	4
Other	−17	1	−18	48	35	12	23	16	8	15	4	10	31	23	6

Area and industry	1967			1968			1969			1970 [p]			1971 [p]		
	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other	Total	New invest-ments[1]	Other
Total	251	133	118	319	426	−107	832	538	294	1,030	796	234	−57	265	−322
By area:															
Canada	9	19	−10	−28	40	−75	243	84	159	236	60	176	85	6	79
Europe	250	96	154	297	303	−8	550	359	191	730	699	31	229	317	13
United Kingdom	65	21	44	114	109	5	88	58	30	520	516	−19	203	119	84
European Economic Community	113	41	72	212	190	22	383	244	110	130	115	16	61	85	−24
Belgium and Luxembourg	18		19	55		25	10		10	6		6	−17		−17
France	25	2	23	10	(*)	10	17	5	12	−27	21	−48	18	10	8
Germany	66	37	28	34	53	−18	204	134	70	48	74	−26	48	46	2
Italy	−6	2	−10	2		2	−2		−2	3		3	18		13
Netherlands	12	(*)	12	141	138	3	125	105	20	107	83	84	−1	29	−30
Other Western Europe	72	34	38	−29	6	−33	101	59	42	65	34	31	−36	13	−49
Sweden	3		3	−74		−74	−9		−9	5		5	31	2	19
Switzerland	63	34	29	51	4	47	107	58	49	50	23	26	−49	0	−68
Other	0		8	−6		−6	8	1	2	2	2		3	1	2
Japan	−2	18	−20	60	74	−14	−34	25	−60	−1		−1	−156	10	−176
Latin America and other Western Hemisphere	−5		−5	−10		−10	11	8	3	50	26	23	80	3	87
Other	−1		−1	−9	(*)	−9	62	62	(*)	3	2	2	16	11	5
By industry:															
Petroleum	8	(*)	8	231	212	19	142	15	127	414	457	−42	43	4	39
Manufacturing	138	84	54	−23	81	−104	507	401	73	545	305	241	287	220	66
Trade	67	21	46	32	67	−35	−41	23	−64	−19	25	−43	−407	24	−531
Insurance	35	1	35	5		5	00		06	44		44	51		81
Other finance	−20	2	−22	47	60	−13	18	14	5	13	16	−1	−11	3	−13
Other	22	25	−3	27	6	81	85	85		31	−6	86	30	6	30

[r] Revised.   [p] Preliminary.   *Less than $500,000 (±).

1. "New investments" consists of the first reported capital inflow to establish or acquire a new company or operation in the United States and the cost of acquisition of additional shares of existing companies.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

sets of transactions (totaling $640 million), the value of foreign direct investments in the United States would have risen 8.1 percent in 1971. Preliminary data suggests that the rate of growth of foreign direct investments in 1972 was similar to the average growth rate in the 1967–71 period.

One factor encouraging the acceleration in direct investment here in recent years was probably the growth of the Eurodollar market. Foreign firms that are discouraged by exchange controls from using national funds to invest abroad can tap the unregulated Eurodollar market for financing such investments.

Foreign investment here may have also been encouraged by the 1967 action of the Securities and Exchange Commission whereby it modified its rules regarding financial reporting of foreign-owned U.S. firms. The new regulations allow such firms' accounting practices to deviate from those commonly employed by U.S. firms in order to mesh better with those of their foreign parents.

Another factor is the merger movement among European firms. Given the scale of the U.S. economy, the size of the required investments in the United States is large by European standards. This problem appears to have been alleviated in the latter part of the 1960's by a merger movement among Western European firms. The investments related to this movement occurred primarily in the U.S. chemical, steel, and fabricated metals industries.

In addition to these institutional factors, the empirical results presented in the second part of this article suggest that the expanding U.S. market has had a substantial impact on the size of the annual additions to foreign direct investments in the United States.

It might be noted that, with a few exceptions, foreign-owned U.S. firms are small by U.S. standards and no U.S. industry is dominated by such firms. They do, however, have a significant position in a few industries (e.g., pharmaceuticals and nickel production). In addition, a very common characteristic is that the foreign ownership share in an affiliate is large, often reaching 95 percent.

Country of ownership

Despite the acceleration in investment here by foreigners, there has been little change over the 1962–71 period in the distribution of foreign direct investments by country of ownership (chart 15). European countries continue to hold the major share of foreign direct investments here, accounting for 69 percent of the total at yearend 1962 and for 73 percent at yearend 1971.

The United Kingdom has traditionally had the largest holdings in U.S. firms ($4.4 billion in 1971). However, the industry distribution of those investments has changed considerably. In 1962, the largest British direct investments were in insurance (mainly fire, marine, and casualty), but British investments in manufacturing and petroleum firms are now considerably larger than their investments in insurance firms (see table 5).
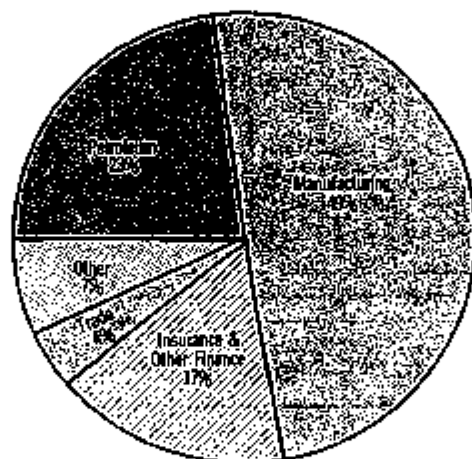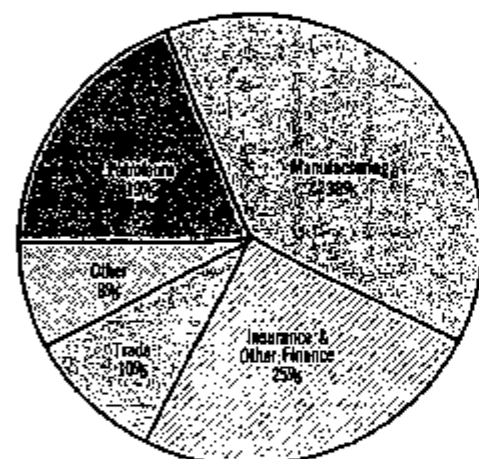
CHART 15

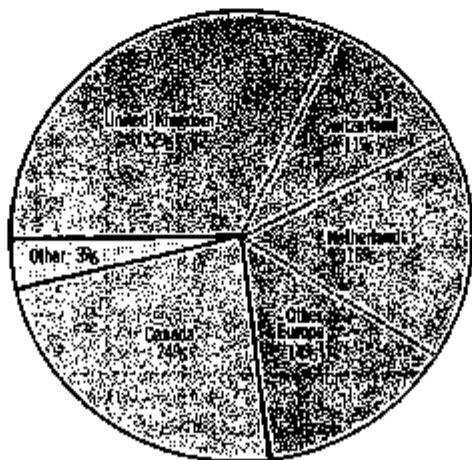## Distribution of Foreign Direct Investments in the United States, 1962 and 1971
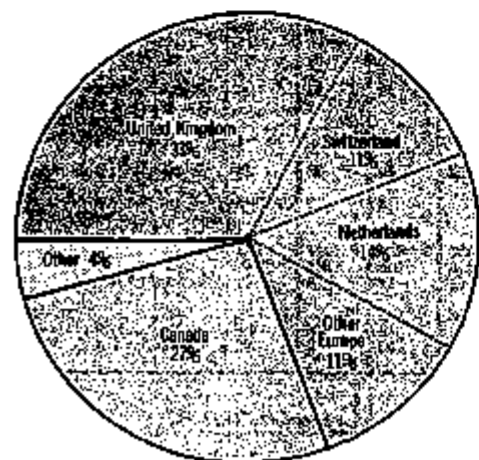
1962 ($7,612 million)　　　　　**1971 ($13,704 million)**

BY MAJOR INDUSTRY OF AFFILIATE

BY COUNTRY OF OWNERSHIP

Canadian direct investments in the United States ($3.3 billion in 1971) have ranked next in size to those of the United Kingdom. A large part of that investment has been in manufacturing ($2.0 billion in 1971), but investment in the "other industry" category has also been significant. In fact, the largest foreign direct investment in U.S. utilities arises from the extension into the United States of two major Canadian railroads.

The Netherlands and Switzerland are the two continental European countries with sizable positions in U.S. firms. The largest Dutch investments have been in the petroleum industry, primarily consisting of an interest (shared by the British) in a major U.S. oil company. Swiss investments are largely in manufacturing, especially in pharmaceuticals and food products.

Industry of investment

The foreign direct investment position in U.S. manufacturing ($6.7 billion at yearend 1971) greatly exceeds that in any other industry and manufacturing's share of total investment has grown significantly during the decade, from 38 percent in 1962 to 49 percent in 1971 (chart 15). As with total foreign direct investment, the investment in manufacturing has grown more rapidly in recent years than earlier in the 1960's. Petroleum investments have also grown substantially in the past decade and are now larger than those in the "insurance and other finance" category, which was the second largest in 1962. The fact that many States limit or prohibit foreign ownership in banks has probably contributed to the decline in the share of total investment represented by "insurance and other finance". Trading companies' share of total investment has also declined over the decade. Such affiliates provide marketing outlets in the United States for goods produced by their foreign parents. Most of the decline shown in chart 15 reflected developments in 1971 when there was a sharp decline in trading company investments due to the activities of Japanese-owned trading companies as noted earlier. However, there was a significant ero-

sion before 1971 in the trading companies' share of total investment.

Components of annual additions to foreign direct investment

The two main components of the annual addition to the foreign direct investment position in U.S. enterprises have been net capital inflows and reinvested earnings; valuation adjustments have generally been small. Of the approximately $6.3 billion added to the value of foreign direct investment in the years 1962 through 1971, $2.6 billion came from net capital inflows while nearly $3.8 billion was reinvested earnings. The value of the foreign share of U.S. firms' assets was adjusted downward by only $100 million net during the decade.

Reinvested earnings are defined to include only the foreign share of undistributed earnings of incorporated affiliates. All earnings of branches are treated in the U.S. balance of payments accounts as if they were remitted to the parent as income and any actual reinvestment in the United States is treated as an offsetting capital inflow. This treatment tends to understate the importance of reinvestment. For example, if branches in 1971 reinvested the same proportion of earnings as incorporated affiliates did, total reinvestment including that of branches would have been $100 million greater than the $498 million reported by incorporated affiliates.

Chart 14 shows that reinvested earnings have been a much more stable component of the annual addi-

tions to foreign direct investment than have net capital inflows, particularly in the 1967–71 period. (Net capital inflows are the sum of new investments, liquidations, and changes in intercompany accounts.) Two factors are principally responsible for the instability of net capital inflows: (1) balances on intercompany accounts—which primarily show the indebtedness of the affiliates to their parents or vice versa—are affected by expectations of changes in exchange rates, as evidenced by the Japanese trading company activities of 1971; and (2) new investments tend to be lumpy and discontinuous. For example, in 1970, when the total flow of new investments was $796 million, a single transaction involving a U.S. and a British petroleum firm accounted for almost $400 million of the total. In 1971, there was no comparable transaction and the total flow of new investments decreased to $255 million. This also contributed to the smallness of the 1971 increase in the value of foreign direct investments in the United States, as mentioned above.

Since 1962 there has been a steady decline in the share of earnings reinvested by foreign-owned U.S. petroleum firms, largely reflecting the use by a foreign parent company of the earnings of one U.S. affiliate to finance production facilities outside the United States. Manufacturing firms, on the other hand, repatriated a significantly smaller share of earnings in the 1967–71 period than in 1962–66 and this contributed to the rapid growth of manufacturing investments in recent years.

The Return on Foreign Direct Investments

TABLE 3 gives alternative measures of the return on foreign direct investments in the United States. Lines A through F give the basic components used to calculate the various measures; panel G gives the dollar return on the basis of each of the four measures; and panel H gives the percentage rates of return, based on the value of the foreign direct investment position at

the beginning of the year, for three of the measures. The following paragraphs deal with the components one by one. Definitions are given in the text or in the Technical Note at the end of this article.

Net earnings of foreign-owned U.S. branches were $232 million in 1971, an increase of $111 million from 1970 (line A). Insurance branches accounted

for $104 million of the increase.

The foreign direct investors' receipts of common stock dividends from incorporated U.S. affiliates were $349 million in 1971, an increase of $69 million from 1970 (line B). Manufacturing affiliates were, as usual, the largest source of dividends. U.S. withholding taxes on dividends in 1971 were $29 million (line C). These are taxes paid by incorporated U.S. affiliates to the U.S. Government in connection with dividends on common stock paid to foreign direct investors. The withholding tax rate depends on the tax treaty with the country of the foreign parent.

The foreign direct investors' share of the reinvested earnings of incorporated U.S. affiliates was $498 million in 1971, up from $434 million in 1970 (line D). The sharp rise in earnings of foreign-owned U.S. corporations made the increase possible.

Interest received by direct investors from their U.S. affiliates was $43 million in 1971 (line E).

CHART 16

Return on Foreign Direct Investments in the United States

Billion $ (Ratio scale)

1962 63 64 65 66 67 68 69 70 71

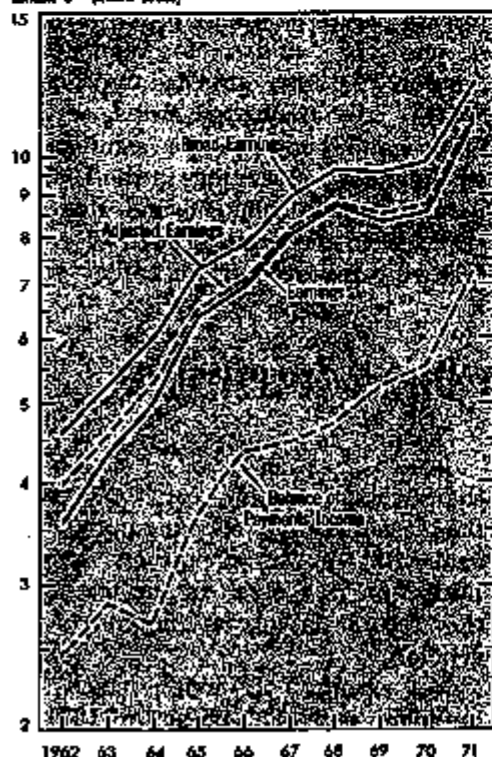U.S. Department of Commerce, Bureau of Economic Analysis

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Table 3.—Alternative Measures of Return on Foreign Direct Investments in the United States, All Areas

(Millions of dollars or percent)

Item	1962	1963	1964	1965	1966	1967	1968	1969	1970*	1971 p
A. Branch earnings	n.a.	64	46	55	94	112	110	124	121	282
B. Dividends [1]	n.a.	126	122	214	243	234	240	261	280	349
C. U.S. withholding taxes	n.a.	9	9	16	18	17	19	20	19	29
D. Reinvested earnings	214	290	327	356	339	440	488	421	434	498
E. Interest [1]	n.a.	32	34	29	33	33	28	32	40	43
F. Royalties and fees	67	61	56	67	64	63	90	101	111	94
G. Measures of return, dollars:										
Earnings [2]	359	438	504	642	695	804	968	824	854	1,110
Adjusted earnings [3]	399	450	529	656	710	891	976	848	875	1,192
Broad earnings [4]	466	626	608	723	774	884	966	949	986	1,216
Balance of payments income [5]	242	280	268	365	434	443	467	618	552	712
H. Measures of return, as a percent of foreign direct investment position at beginning of year:										
Adjusted earnings	5.4	6.0	5.7	7.8	8.1	9.1	8.8	7.8	7.4	8.4
Broad earnings	6.3	6.8	7.5	8.6	8.8	9.8	9.6	8.8	8.8	9.2
Balance of payments income	3.3	3.7	3.4	4.4	4.9	4.9	4.7	4.8	4.7	5.4

* Revised.   p Preliminary.   n.a. Not available.
1. Includes preferred dividends, which in 1971 totaled $2 million.
2. Equals A+B+C+D.
3. Equals A+B+D+E.
4. Equals A+B+D+E+F.
5. Equals A+B+E+F.
NOTE.—For an explanation of items A–F, see the Technical Note.

Foreign direct investment royalties and fees are net payments by U.S. affiliates to foreign direct investors which take the form of: (1) royalties, license fees, and rentals, which include parent company charges to cover a portion of the funds spent by the parent firm for research and development of new products and processes, and rental fees for the use of tangible property; or (2) management fees and service charges, which represent an allocation of administrative and other expenses incurred by parent firms on behalf of their affiliates. These figures are net of any payments by foreign parents to the U.S. affiliates. Table 4 shows data on royalties and fees on an area basis. Foreign direct investment royalties and fees were $94 million in 1971, down from $111 million in 1970 (line F, table 3). Historically, the largest share of royalties and fees has been paid to Canadian parent firms. Parents of manufacturing affiliates receive most of the royalties and fees.

Alternative measures of return

Four useful measures of the dollar return on foreign direct investment, reflecting alternative analytic viewpoints, can be obtained from different combinations of the components in lines A through F. These returns are shown in panel G of table 3 and in chart 16, and corresponding rates of return are shown in panel H.

The *earnings* measure of return, which reflects the viewpoint of the affiliates, is the sum of branch earnings, dividends, withholding taxes, and reinvested earnings of incorporated affiliates (lines A+B+C+D). Payments of interest and of royalties and fees are excluded because they are costs to the affiliates.

Earnings of foreign-owned U.S. firms increased $256 million, or 30 percent, to $1,110 million in 1971. The earnings of Canadian-owned manufacturing firms and British-owned insurance firms were primarily responsible for the rise, increasing $80 million and $57 million, respectively. Earnings of foreign-owned U.S. corporations were up 20 percent in 1971, while earnings of all U.S. corporations were up only 14 percent. A word of caution in drawing comparisons: The earnings figure for foreign-owned U.S. corporations is the foreign share in these corporations' earnings; therefore, earnings of foreign-owned U.S. corporations will rise if the foreign share of equity in these corporations increases during the years.

The *adjusted earnings* measure focuses on the return realized by the parent firm. It is equal to earnings of affiliates, as defined above, plus interest paid to parents less withholding taxes paid to the U.S. Government on common stock dividends (lines A+B+D+E). Interest is included because it represents a return on loans made by the parent to the affiliate and such loans are included in the value of foreign direct investments

Table 4.—Payments of Royalties and Fees on Foreign Direct Investments in the United States, by Area of Ownership

[Millions of dollars]

|	Total	Canada	United Kingdom	Europe except United Kingdom	Other
1962.........	57	22	10	14	1
1963.........	61	40	9	12	-----
1964.........	66	25	11	19	1
1965.........	67	38	11	17	1
1966.........	64	41	12	10	1
1967.........	63	43	11	8	1
1968.........	80	47	21	9	3
1969.........	101	56	25	16	4
1970 r.......	111	62	19	23	7
1971 P.......	94	64	11	15	4

r Revised.   P Preliminary.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

in the United States. Interest paid by foreign-owned U.S. firms on loans from their parents has always been small; therefore, the difference between earnings and adjusted earnings has been slight. Withholding taxes are excluded since only the dividends actually received represent a benefit to parent firms. In 1971 adjusted earnings were $1,122 million.

Rates of Return on Foreign Direct Investments in the United States and on Total Manufacturing in the United States[1]
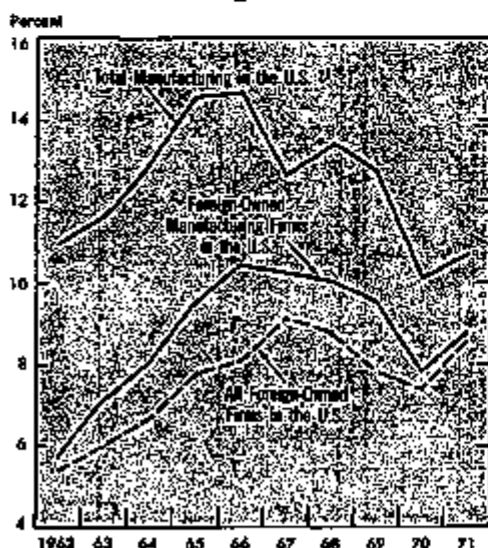
1. Rate of return on foreign direct investments is adjusted earnings divided by book value at beginning of year. Rate of return on total manufacturing in the United States is often-ion income divided by net worth at beginning of year, as computed by First National City Bank of New York.

2. Excluding petroleum.

U.S. Department of Commerce, Bureau of Economic Analysis   72-2-17

The *broad earnings* concept is the most complete measure of the benefits received by foreign direct investors from their U.S. affiliates. It is calculated by adding royalties and fees to adjusted earnings (lines A+B+D+E+F). In 1971, broad earnings totaled $1,216 million.

The *balance of payments income* measure (lines A+B+E+F) focuses on other nations' returns on direct investments in the United States as recorded in the U.S. balance of payments accounts. Reinvested earnings are thus excluded. (A revision of the U.S. balance of payments accounting framework that would include reinvested earnings is being considered.) From the balance of payments viewpoint, the return to other countries on foreign direct investments in the United States was $718 million in 1971.

Chart 16 indicates that all the alternative measures of the dollar return on foreign direct investments in the United States increased substantially over the 1962–71 period. The increase was sharpest on the earnings basis and slowest on the broad earnings basis.

Chart 17 presents rates of return from all foreign-owned U.S. firms, foreign-owned U.S. manufacturing firms, and all U.S. manufacturing firms. The rate of return from all U.S. manufacturing firms (as computed by the First National City Bank of New York) is a return on net worth; adjusted earnings, the most comparable measure, is used for calculating rates of return from all foreign-owned U.S. firms and from foreign-owned U.S. manufacturing firms.[3] The chart indicates that the rates of return from foreign-owned U.S. manufacturing firms and from all U.S. manufacturing firms are both related to the U.S. business cycle. While the rate of return from all U.S. manufacturing firms has always been higher than that from foreign-owned U.S. manufacturing firms, the gap has narrowed substantially in recent years (to only 2.0 percent in 1971). This probably reflects the fact that many of the foreign direct investments in manufacturing, which were started in the late 1950's, are only now becoming seasoned investments. The rate of return from all foreign-owned U.S. firms has always been less than that from foreign-owned U.S. manufacturing firms since the generally low rates of return on foreign-owned U.S. banks and insurance firms have pulled down the all-industry rate of return.

The Determinants of Foreign Direct Investment in the United States

THIS section of the article presents the results of an investigation of three possible determinants of foreign direct investment in the United States: (1) the size of the host country's market (the host country being that in which the investment takes place); (2) the market's rate of growth; and (3) the level of tariffs in the host country. Our investigation was limited to these three factors, although it is recognized that other factors—such as rates of return, wage differentials, transportation costs, the supply of available funds, and differential rates of inflation—may also have influenced foreign investment.

It was hypothesized that the three factors are each positively related to foreign direct investment in the United States. The evidence indicated that only the size-of-market hypothesis can be supported statistically. In this respect, the findings presented here are similar to those of a recent study of the determinants of U.S. direct investment in the Common Market.[4]

3. The latter two rates of return are returns on the book value of the foreign parents' position in their affiliates, which is the sum of the parents' share in the net worth of the affiliates and any balances on intercompany accounts (including long-term debt). Since U.S. affiliates are generally net debtors with respect to their foreign parents, rates of return calculated on the basis of book value are probably lower than those calculated on the basis of net worth.

4. A. E. Scaperlanda and L. T. Mauer, "The Determinants of U.S. Direct Investment in the E. E. C.," American Economic Review, Vol. LIX (September 1969), pp. 558–568. The investigation of foreign direct investment in the United States for which results are presented here followed the general line of attack taken by Scaperlanda and Mauer.

Table 5.—Selected Data on Foreign Direct Investments

[Millions]

Area and year	Value of foreign direct investments at yearend					Earnings				
	Total	Petroleum	Manufacturing	Insurance and other finance	Other	Total	Petroleum	Manufacturing	Insurance and other finance	Other
All areas:										
1962	7,612	1,419	2,885	1,943	1,365	350	125	146	87	19
1963	7,944	1,513	3,018	2,045	1,369	426	158	197	68	15
1964	8,363	1,612	3,312	2,161	1,586	604	172	235	51	46
1965	8,797	1,718	3,478	2,169	1,441	642	215	303	51	72
1966	9,054	1,740	3,790	2,072	1,443	693	214	357	83	41
1967	9,923	1,885	4,181	2,193	1,564	804	237	380	109	70
1968	10,815	2,961	4,475	2,305	1,774	868	263	410	111	84
1969	11,518	2,493	4,844	2,169	1,792	884	219	414	119	82
1970 r	12,270	2,692	5,140	2,256	1,881	854	215	399	127	113
1971 p	13,704	3,113	6,748	2,322	1,491	1,110	203	512	247	149
Canada:										
1962	2,064	212	1,016	269	568	90	18	53	18	1
1963	2,180	218	1,063	357	570	114	22	59	27	6
1964	2,284	205	1,129	382	568	109	25	65	19	−1
1965	2,388	209	1,219	370	591	135	33	57	30	6
1966	2,439	98	1,342	386	613	133	23	95	21	−6
1967	2,575	99	1,307	354	725	146	20	57	33	6
1968	2,659	100	1,413	376	770	152	20	95	26	11
1969	2,634	152	1,644	325	733	122	13	95	9	5
1970 r	3,117	190	1,930	324	767	62	14	59	−13	2
1971 p	3,329	207	2,025	305	802	212	22	139	25	21
Europe:										
United Kingdom:										
1962	2,474	416	762	1,023	273	102	35	35	25	8
1963	2,685	460	779	1,085	321	142	45	64	24	0
1964	2,796	428	812	1,154	332	167	59	70	21	17
1965	2,852	511	820	1,176	326	214	71	95	23	25
1966	2,884	558	906	1,075	325	234	78	169	45	11
1967	3,156	612	1,000	1,169	346	257	80	161	47	29
1968	3,409	748	1,075	1,239	345	271	91	123	41	18
1969	3,496	839	1,176	1,143	348	272	61	144	50	17
1970 r	4,127	1,230	1,301	1,141	275	289	83	149	49	18
1971 p	4,435	1,273	1,615	1,183	364	350	66	154	106	24
Netherlands:										
1962	1,082	736	248	43	55	103	73	28	1	1
1963	1,134	772	275	36	51	113	83	27	1	−1
1964	1,231	842	296	39	54	120	80	39	2	2
1965	1,304	837	328	46	53	147	100	45	(*)	(*)
1966	1,462	852	356	80	61	153	107	42	2	2
1967	1,568	1,033	388	41	57	177	118	52	4	3
1968	1,750	1,215	436	54	55	192	139	57	4	1
1969	1,968	1,375	585	56	101	186	121	59	4	1
1970 r	2,151	1,312	682	58	130	187	100	80	5	2
1971 p	2,225	1,346	707	41	131	176	103	66	3	2
Switzerland:										
1962	836	----------	454	280	43	53	----------	36	16	1
1963	825	----------	477	307	41	49	----------	45	1	3
1964	806	----------	530	318	46	53	----------	04	----------	2
1965	940	----------	590	303	47	71	----------	66	1	4
1966	948	----------	615	297	47	89	----------	82	6	1
1967	1,096	----------	744	309	43	102	----------	89	11	2
1968	1,238	----------	863	331	44	113	----------	88	23	2
1969	1,305	----------	1,036	322	46	113	----------	94	26	1
1970 r	1,545	----------	1,147	351	47	136	----------	96	34	3
1971 p	1,537	----------	1,106	375	55	118	----------	81	33	4
Other Europe: **										
1962	855	51	333	207	264	10	----------	6	4	
1963	856	54	350	272	281	16	----------	7	10	5
1964	897	64	347	212	283	19	8	3	13	
1965	960	90	430	300	281	52	12	31	−5	16
1966	1,050	108	438	270	284	65	13	27	6	17
1967	1,245	136	529	279	302	108	19	60	11	26
1968	1,853	179	576	331	307	111	22	42	8	39
1969	1,653	218	793	245	397	88	24	21	9	22
1970 r	1,731	245	981	255	329	90	16	23	17	33
1971 p	1,881	251	1,023	283	322	113	12	54	26	21
Japan:										
1962	113	−2	51	19	44	−3	----------	−4	----------	(*)
1963	104	−4	55	20	33	4	----------	2	(*)	2
1964	72	−3	54	22	−1	7	----------	−4	2	9
1965	113	----------	50	22	40	22	----------	1	1	20
1966	102	----------	60	22	21	14	----------	4	1	9
1967	109	----------	64	26	19	12	----------	3	8	8
1968	131	----------	65	33	53	20	----------	1	3	17
1969	176	----------	67	39	70	41	----------	2	8	30
1970 r	229	−3	70	43	120	71	----------	3	14	54
1971 p	−174	−3	56	62	−316	92	----------	7	26	61
Other areas:										
1962	190	8	21	45	118	6	----------	(*)	1	4
1963	185	−8	19	48	102	−1	----------	(*)	4	−5
1964	187	5	24	52	105	9	----------		4	4
1965	214	23	28	51	104	3	----------	−2	3	1
1966	288	27	50	51	109	8	----------	−1	2	3
1967	285	16	48	54	112	2	----------	−2	1	−3
1968	225	15	56	41	110	3	----------	4	1	−1
1969	266	38	103	50	87	13	----------	3	12	2
1970 r	370	28	143	84	114	30	----------	7	31	2
1971 p	451	38	178	113	131	44	----------	0	31	4

** Excluding United Kingdom, Netherlands, and Switzerland.
See footnotes to table 1.

in the United States, Country by Industry Detail

of dollars]

Area and year	Reinvested earnings					Interest, dividends, and branch earnings				
	Total	Petroleum	Manufacturing	Insurance and other finance	Other	Total	Petroleum	Manufacturing	Insurance and other finance	Other
All areas:										
1962	214	116	88	-2	12	185	14	76	74	21
1963	236	138	84	5	7	228	17	122	62	22
1964	237	154	135	6	31	212	18	106	51	28
1965	268	184	120	6	88	290	26	176	52	45
1966	339	134	200	-5	20	371	31	150	06	33
1967	440	137	355	10	38	381	90	132	105	54
1968	488	143	380	13	52	386	100	137	101	41
1969	431	90	276	14	51	417	124	140	111	33
1970 '	434	85	256	16	76	441	110	169	131	28
1971 '	483	78	313	26	76	623	116	217	224	66
Canada:										
1962	56	14	45	-1	-2	48	6	11	19	12
1963	66	15	46	2	3	65	8	19	25	12
1964	61	14	46	4	-3	63	11	21	15	18
1965	58	11	49	4	3	64	20	29	22	13
1966	80	11	82	-5	-8	77	9	18	18	14
1967	80	7	72	-2	3	54	12	18	18	16
1968	102	6	88		7	64	10	17	24	13
1969	84	6	74	(*)	1	47	4	24	10	8
1970 '	32	4	31	2	-5	29	0	32	-14	12
1971 '	137	16	100	2	16	83	10	27	24	17
Europe:										
United Kingdom:										
1962	44	25	7	-1	3	68	2	30	27	4
1963	77	44	28	-1	6	67	2	37	24	4
1964	95	56	32	(5)	8	73	4	38	21	10
1965	91	67	16	(5)	8	116	1	76	34	16
1966	102	42	49	-1	2	125	24	45	48	9
1967	126	46	66		11	124	27	82	47	18
1968	106	47	57	-1	5	146	27	50	41	13
1969	107	10	85	4	8	159	49	53	45	12
1970 '	124	33	81	2	8	164	43	64	45	11
1971 '	104	20	71	2	11	236	41	76	104	13
Netherlands:										
1962	79	67	13	-1	(*)	25	7	15	2	1
1963	86	76	14	-2	-4	27	6	16	4	1
1964	102	78	23	(*)	1	19	2	14	2	1
1965	120	96	24	(*)	-1	26	4	20	1	1
1966	78	61	18	-2	1	73	45	23	4	1
1967	93	67	21	3	2	80	46	29	1	2
1968	102	68	31	2	1	87	59	26	2	
1969	81	51	29	1		101	67	28	4	1
1970 '	87	40	38	1		96	67	34	4	1
1971 '	75	35	16	1	1	97	64	31	1	1
Switzerland:										
1962	34		32	(*)	2	26		9	16	(*)
1963	8		6	(*)	2	40		29	1	(*)
1964	37		35	(*)	2	26		24	-1	
1965	27		24	(*)	3	34		32	1	1
1966	23		22	(*)	1	64		58	5	
1967	71		69		2	36		24	11	1
1968	41		28	1	2	39		18	21	
1969	78		76	1	1	49		24	25	(*)
1970 '	90		88		3	58		22	35	1
1971 '	48		43	1	4	38		49	33	1
Other Europe:										
1962	1		-3		4	17		8	7	2
1963	3	3	-10	6	4	14	1	6	5	2
1964	22	7	4	1	10	14		4	5	8
1965	28	10	17	3	10	17	1	16	-7	7
1966	42	10	19	3	10	21	2	9	5	6
1967	65	17	28	8	12	48	4	26	8	11
1968	80	19	29	6	27	23	1	13	6	12
1969	52	20	10	6	17	23		16	8	9
1970 '	58	18	13	6	22	45		17	18	9
1971 '	65	12	40	13	-3	50		17	17	16
Japan:										
1962	-4		-4		(*)	4		2		1
1963	2		(*)		2	6		5	(*)	1
1964	6		-4	7	0	4		2	1	1
1965	14		(*)	(*)	14	10		3	(*)	7
1966	8		1	(*)	7	7		5		3
1967	7		1	1	5	8		4	1	3
1968	13		-1	2	12	15		4	6	5
1969	29			3	26	9		4	7	-2
1970 '	55		1	4	40	17		4	10	3
1971 '	53		5	5	43	40		5	19	16
Other areas:										
1962	5		(*)	(*)	4	2		(*)	2	(*)
1963	-6		(*)		-5	4		(*)	3	1
1964	4		(*)		4	4		(*)	4	(*)
1965	(*)		-2	(*)	1	3		(*)	3	(*)
1966	6		-1	(*)	7	1		(*)	2	(*)
1967	1		-2	(*)	3	1			1	
1968	3		4	(*)	-3	13			1	1
1969	(*)		2	(*)	-3	13		(*)	12	1
1970 '	9		5	1	2	32		(*)	22	1
1971 '	16		0	4	4	29		(*)	27	2

Table 6.—Net Capital Inflows to Foreign Direct Investments in the

[Millions of dollars]

Area and year	All industries				Petroleum				Manufacturing				Insurance and other finance			
	Total	New investments	Liquidations	Intercompany accounts	Total	New investments	Liquidations	Intercompany accounts	Total	New investments	Liquidations	Intercompany accounts	Total	New investments	Liquidations	Intercompany accounts
All areas:																
1962	132	38	−98	121	−22	...	−3	−17	41	27	−6	20	47	6	...	40
1963	−5	151	−77	−73	−44	20	−5	−60	42	43	−14	−8	(*)	30	−40	11
1964	−5	71	−17	−69	−55	1	−2	−54	59	45	−3	23	33	5	−8	30
1965	57	100	−77	33	−88	...	−68	6	132	75	−6	62	−57	11	−1	−66
1966	36	93	−143	141	−94	1	−127	32	111	47	−15	79	77	9	−3	72
1967	251	133	−50	168	8	(*)	−4	12	138	84	−24	78	16	3	−7	20
1968	319	426	−108	1	281	252	...	19	−25	31	−93	−11	62	60	(*)	−8
1969	532	538	−17	311	142	15	−4	131	467	401	−9	175	79	14	...	65
1970 ʳ	1,030	790	−9	942	414	457	−5	−38	646	905	−3	244	59	25	...	43
1971 ᵖ	−57	255	−23	−291	43	4	−1	40	287	220	−4	70	70	2	−18	85
Canada:																
1962	48	7	−4	40	4	...	−8	7	−5	2	−1	−6	30	4	...	16
1963	44	32	−17	28	−16	(*)	−6	−19	2	4	−1	−1	57	27	−1	31
1964	26	8	−7	24	−22	(*)	−2	−21	20	7	−4	16	28	(*)	...	27
1965	43	58	−8	−8	−3	...	−4	−4	46	47	−4	3	−16	7	...	−23
1966	2	25	−125	102	−121	...	−124	3	41	8	−1	34	53	6	...	47
1967	3	19	−12	2	−6	...	−4	−2	−17	5	−1	−21	−1	1	−7	5
1968	−28	49	−17	−58	−8	...	...	−8	−78	44	−17	−100	17	...	...	17
1969	243	84	...	159	28	...	...	23	167	84	...	73	24	(*)	(*)	24
1970 ʳ	238	60	−6	185	54	45	−5	11	181	12	...	149	−16	(*)	...	−18
1971 ᵖ	85	6	...	79	7	...	...	7	80	4	...	76	−21	...	...	−21
Europe:																
United Kingdom:																
1962	19	2	−22	40	(*)	...	...	(*)	7	2	−5	10	5	...	...	4
1963	44	36	−5	12	20	8	...	12	−11	10	−2	−19	−7	1	...	−8
1964	−35	33	−5	−64	−37	...	...	−37	1	13	−2	−10	−2	8	...	−8
1965	−66	11	−23	−69	−63	...	−26	−19	10	8	−1	3	−17	1	...	−18
1966	23	18	−5	9	6	...	...	−1	8	5	−1	4	12	...	−8	16
1967	65	21	−2	46	6	...	...	8	37	21	...	16	10	...	...	10
1968	114	109	−15	20	90	84	...	5	13	2	...	11	17	22	...	−5
1969	66	56	−17	47	70	7	−4	67	15	7	−9	17	8	4	...	2
1970 ʳ	629	643	(*)	−19	346	408	...	−65	134	133	...	1	18	9	...	...
1971 ᵖ	203	119	−9	85	32	4	−1	29	143	111	...	42	40	2	...	38
Netherlands:																
1962	−19	1	...	−20	−24	...	...	−24	4	1	...	3	2	...	...	3
1963	−35	15	...	−50	−40	12	...	−52	10	2	...	8	−8	1	...	−9
1964	−6	4	...	−10	−8	...	...	−8	−2	3	...	−5	2	1	...	1
1965	−33	...	−40	5	−37	...	−39	2	3	...	...	8	−3	...	−1	−2
1966	20	3	−3	18	5	(*)	−2	7	10	...	...	10	5	8	...	−3
1967	13	(*)	...	13	1	...	...	1	11	...	...	11	−2	...	...	−3
1968	141	136	(*)	4	125	127	...	−2	6	...	...	8	11	11	(*)	(*)
1969	126	105	...	20	6	3	...	(*)	70	50	...	20	(*)	...	...	(*)
1970 ʳ	107	23	...	84	6	6	...	(*)	70	...	...	70	−2	...	...	−3
1971 ᵖ	−1	29	−16	−13	...	...	...	...	17	29	...	−12	−18	...	−18	...
Switzerland:																
1962	−7	3	...	−10	...	...	...	...	−12	3	−3	−15	15	...	...	15
1963	−83	20	−47	−6	...	...	...	...	14	20	−8	2	−42	...	−20	−3
1964	24	2	−2	24	...	...	...	...	15	2	−2	13	1	...	...	1
1965	6	6	(*)	(*)	...	...	...	...	26	4	(*)	22	−16	2	...	−18
1966	7	(*)	−3	10	...	...	...	...	3	(*)	−3	6	5	...	...	5
1967	68	34	−13	42	...	...	...	...	60	20	...	40	9	...	...	9
1968	61	4	(*)	47	...	...	...	...	41	4	(*)	37	11	...	...	11
1969	107	58	...	49	...	...	...	...	88	56	...	30	19	...	...	19
1970 ʳ	69	33	...	26	...	...	...	...	33	33	...	(*)	27	...	...	27
1971 ᵖ	−58	9	−4	−64	...	...	...	...	−87	6	−4	−89	23	...	...	23
Other Europe ᵃᵃ																
1962	68	23	...	45	(*)	...	...	1	48	12	...	24	2	1	...	1
1963	6	27	−1	−20	(*)	...	...	1	27	29	...	−1	−3	(*)	...	−4
1964	6	20	−3	−11	3	...	...	3	11	19	...	−8	−3	...	−3	1
1965	50	20	(*)	30	9	...	...	9	26	12	−1	15	(*)	1	...	−1
1966	41	40	−10	11	13	(*)	...	11	30	33	−10	7	3	...	...	3
1967	110	41	−23	92	14	...	...	14	42	38	−23	27	−3	...	...	−3
1968	−9	52	−76	15	24	...	...	24	−18	31	−76	27	6	21	(*)	−16
1969	242	140	...	92	30	...	...	20	190	140	...	50	9	...	...	9
1970 ʳ	35	95	−3	−57	6	...	...	8	76	95	−3	−6	4	...	...	4
1971 ᵖ	66	69	...	27	−8	...	...	−8	90	49	...	34	18	...	...	18
Japan:																
1962	24	...	...	24	−2	...	...	−1	4	...	...	4	1	...	...	1
1963	−10	21	...	−41	−3	...	...	−2	4	...	...	4	1	1	...	(*)
1964	−35	2	...	−40	1	...	...	1	5	...	...	3	1	1	...	(*)
1965	33	2	...	31	3	...	...	3	2	...	...	3	−1	(*)	...	...
1966	−24	3	(*)	−27	...	...	...	...	2	(*)	...	2	(*)	...	...	...
1967	−2	18	...	−20	...	...	...	...	3	...	...	3	2	2	...	1
1968	60	74	(*)	−14	...	...	...	...	3	...	...	3	4	8	(*)	(*)
1969	−34	25	...	−59	(*)	(*)	...	...	2	...	...	2	2	2	...	(*)
1970 ʳ	−1	...	...	−1	...	...	...	...	2	...	...	2	(*)	...	...	(*)
1971 ᵖ	−456	19	...	−475	...	...	...	...	19	10	...	0	2	...	...	2
Other areas:																
1962	3	1	...	2	...	...	...	...	(*)	...	...	(*)	2	1	...	1
1963	−21	...	−7	−14	...	...	...	...	−3	...	−2	−1	1	...	...	1
1964	19	2	(*)	17	−9	...	...	−9	6	...	...	9	5	1	(*)	4
1965	24	4	...	21	8	...	...	3	13	4	...	9	−4	...	...	4
1966	16	(*)	...	18	17	...	...	17	15	...	...	18	(*)	(*)	...	(*)
1967	−6	(*)	(*)	−6	−9	...	...	−9	2	...	...	2	(*)	...	...	...
1968	−12	(*)	...	−12	(*)	...	...	(*)	4	(*)	...	4	−15	...	...	−15
1969	73	70	...	3	31	...	...	31	45	62	...	−17	18	7	...	11
1970 ʳ	63	37	...	26	−18	...	...	−10	68	42	...	26	23	0	...	23
1971 ᵖ	76	14	(*)	61	12	...	...	12	25	11	...	14	25	...	(*)	26

ᵃᵃ Excluding United Kingdom, Netherlands, and Switzerland.
See footnotes to table 2.

United States, Country by Industry Detail

outflows (−)]

Total	New investments	Liquidations	Intercompany accounts	Year
		Other industries		
66	5	−18	79	1962
−3	35	−19	−22	1963
−42	20	−4	−57	1964
45	15	−1	30	1965
−8	83	....	−41	1966
38	45	−15	58	1967
59	74	−15	1	1968
44	108	−4	−60	1969
12	18	....	−7	ʳ1970
−457	22	....	−496	ᵖ1971
24	2	....	23	1962
−1	1	−10	8	1963
(*)		−1	1	1964
20	5	....	15	1965
30	12	....	18	1966
33	13	....	20	1967
38	6	....	33	1968
39		....	39	1969
39		....	39	ʳ1970
19	2	....	17	ᵖ1971
7	....	−18	25	1962
42	18	−3	27	1963
3	17	−8	−11	1964
−13	9	−1	−15	1965
−3	13	....	−18	1966
10	(*)	−2	12	1967
−5		−15	9	1968
−5	68	−4	−39	1969
19	9	(*)	10	ʳ1970
−23	2	−1	−22	ᵖ1971
−1	....	....	−1	1962
....	....	....		1963
2	....	....	2	1964
	....	....		1965
(*)	....	....	(*)	1966
2	....	....	2	1967
−3	....	....	−3	1968
47	47	....	(*)	1969
33	17	....	16	ʳ1970
....	....	....		ᵖ1971
−10	....	....	−10	1962
−5	....	....	−5	1963
5	....	....	5	1964
−4	....	....	−4	1965
−1	....	....	−1	1966
−6	14	−13	−7	1967
−1	....	....	−1	1968
(*)	....	....	(*)	1969
−1	....	....	−1	ʳ1970
5	5	....	2	ᵖ1971
24	3	....	21	1962
−16		−1	−15	1963
−8	1	....	−9	1964
15	7	....	7	1965
−5	6	....	−11	1966
57	3	....	54	1967
−20		....	−20	1968
13		....	15	1969
−51	10	....	−61	ʳ1970
−5	10	....	−15	ᵖ1971
21	....	....	21	1962
−14	19	....	−33	1963
−43	1	....	−44	1964
30	2	....	27	1965
−26	3	....	−29	1966
−8	16	....	−24	1967
52	68	....	−15	1968
−39	23	....	−61	1969
−5	....	....	−3	ʳ1970
−477	9	....	−480	ᵖ1971
1	....	....	1	1962
−10	....	−5	−5	1963
−1	(*)	....	−1	1964
−2	....	....	−2	1965
−2	....	....	−2	1966
1	....	(*)	1	1967
−1	....	....	−1	1968
−11	1	....	−12	1969
−34	−12	....	−11	ʳ1970
13	5	(*)	10	ᵖ1971

Analytical framework

The dependent variable used is the annual change in the foreign direct investment position, denoted by ΔI. The size-of-market hypothesis is tested by relating ΔI to host country GNP, denoted by Y. GNP is thus assumed to adequately reflect the potential demand for an affiliate's output. The market-growth hypothesis is tested in two alternative ways, by relating ΔI to the absolute change in U.S. GNP (ΔY) and to the percentage rate of growth of U.S. GNP ($\Delta Y / Y$).

Because tariffs make a foreign country's exports less competitive with goods produced in the host country, it is frequently argued that high tariff levels encourage direct investment. However, the irreversible nature of many direct investments suggests that it may not be so much the current level but expected changes in the level of tariff which affect direct investment. Both forms of the hypothesis were examined.

The level of the U.S. tariff barrier is represented by the ratio

$$T = \frac{\text{total tariff proceeds}}{\text{total value of dutiable imports}}$$

Another proxy used in other studies replaces the denominator of T by the total value of all imports.[5] However, a ratio calculated that way could move, suggesting a change in the level of the tariff barrier, if there were simply a change in the dutiable-nondutiable composition of imports. This is not to suggest that the ratio T suffers from no conceptual difficulties. For example, T could move if there were a change in the composition of dutiable imports since tariff rates differ among commodity groups. In addition, T could fall as tariff barriers become high enough to be completely prohibitive; however, the other proxy is subject to this same criticism.

Expected changes in tariff barriers are represented by the annual change

5. Scaperlanda and Mauer employed neither of these proxies but instead used U.S. exports to the E.E.C. ÷ exports from E.E.C. countries to other E.E.C. countries. The use of this ratio is based on the assumption that a higher E.E.C. tariff barrier for countries outside the E.E.C. will have the effect of decreasing U.S. exports to the E.E.C. (the numerator of the ratio) while simultaneously increasing intra-area exports (the denominator).

in the ratio T, denoted by ΔT. This implies that firms use past experience in predicting the future—a common assumption in economic literature. While the relationship between ΔI and T should be positive (i.e., the two variables should move in the same direction), that between ΔI and ΔT may be either positive or inverse. If firms expect tariff levels to rise in the future because they rose in the past, the relationship between ΔI and ΔT would be positive. If, on the other hand, a rise in the level of tariffs was expected to be temporary and reversible (as with "temporary" surcharges), the relationship between ΔI and ΔT could be inverse.

Empirical results

A number of combinations and variants of the three hypotheses (size-of-market, market-growth, tariff-barrier) were tested by applying the ordinary least squares regression technique to annual data for the 1952–71 period. The most interesting results of these tests are summarized in table 7. Equations (1)–(4) each contain three explanatory variables representing different versions of the three hypotheses. Equations (5) and (6) test all three hypotheses but also examine the possibility that foreign direct investment in the United States is influenced by both the level of and expected changes in tariff barriers.

The size of the U.S. market (Y) was the only variable statistically significant (at the one percent level) in all equations and its coefficient always had the expected positive sign. However, there were relatively large fluctuations in the size of its coefficient among equations. All other coefficients whose signs could be theoretically specified were incorrectly signed (the sign of the coefficient of ΔT was left unspecified), but the only statistically significant coefficient for these other variables as indicated by the "t" ratio was that of the annual change in the size of the U.S. market (ΔY) in equation (3). However, the Durbin-Watson statistic for equation (3) indicates the presence of positive serial correlation; this imparts an upward bias to the "t" ratio (the measure of statistical sig-

Table 7.—Equations for Explaining Changes in the Value of Foreign Direct Investments in the United States: Annual Data, 1952–71

Equation	Constant	Y	ΔY	ΔY/Y	T	ΔT	SEE	SEE†	R²	DW
1	574.23 (0.82)	1.54 **(3.04)	−6.55 (1.65)		−57.47 (1.12)		168.0	0.31	0.74	**1.44
2	1,456.25 (1.26)	1.04 **(3.15)		−21.75 (1.11)	−121.63 (1.36)		172.0	.33	.72	**1.62
3	−282.56 (2.62)	1.90 **(5.29)	−8.19 *(2.23)			−53.15 (.62)	162.0	.29	.73	1.39
4	−117.84 (0.87)	1.37 **(5.42)		−30.80 (1.64)		−60.21 (.65)	161.0	.34	.70	**1.66
5	576.88 (0.66)	1.55 **(2.95)	−6.55 (1.60)		−90.8 (.91)	−17.74 (.19)	171.0	.33	.72	1.45
6	1,380.22 (1.06)	1.05 **(3.01)		−21.54 (1.07)	−115.83 (1.15)	−14.24 (.14)	179.0	.34	.70	**1.51

Note.—R² is the coefficient of determination corrected for degrees of freedom. Values in parentheses are t ratios, DW is the Durbin-Watson statistic, SEE is the standard error of estimate corrected for degrees of freedom (measured in millions of dollars), and SEE† is SEE as a percentage of the average value of the dependent variable.

The dependent variable in each equation is ΔI, the annual change in foreign direct investment in the United States (measured in millions of dollars). The independent variables Y, ΔY, ΔY/Y, T, and ΔT represent U.S. GNP, the annual change in U.S. GNP, the percentage change in U.S. GNP, the level of tariff barriers, and the annual change in the level of tariff barriers, respectively. The variables Y and ΔY are measured in billions of dollars.

The symbols * and ** above the t ratios indicate that the regression coefficients are significantly different from zero at 5 percent and 1 percent confidence levels respectively.

The symbol ** above the Durbin-Watson statistics indicate that the null hypothesis of serial independence of the residuals cannot be rejected at the 1 percent level of significance. Tests of the Durbin-Watson statistic are based on the Theil-Nagar one-tailed testing procedure.

nificance) and thus may lead one to erroneously find a variable significant when it is not.

These results resemble those of the Scaperlanda and Mauer study of U.S. direct investment in the Common Market, in that only the size-of-market hypothesis can be supported. However, Scaperlanda and Mauer obtained coefficients of determination ($R²$) in the neighborhood of 0.95, while the values for the equations presented here cluster around 0.72. More importantly, the standard error of estimate for the equations presented here is consistently a much higher percentage of the average value of the dependent variable than was the case in the Scaperlanda-Mauer work.

It should be noted that this is a relatively simple model of direct investors' behavior compared to the accelerator and neoclassical investment models employed in recent years. Most of these models, however, also rest on the notion that direct investment is related to the size of the market for the output of the direct investment firm.

Technical Note

The various components of the four measures of return on foreign direct investments presented in table 3 are defined below.

Item and definition

1. Branch earnings (line A): The net earnings of U.S. branches of foreign companies after U.S. income taxes, but before depletion charges (except amortization of the actual costs of capital assets) and foreign taxes. Included in branch earnings are the foreign share in the net earnings of U.S. partnerships, sole proprietorships, and other types of unincorporated organizations.

2. Dividends (line B): Dividends on common or voting stock only, net of U.S. withholding taxes; dividends are included in income as balance of payments flow items.

3. U.S. withholding taxes (line C): Taxes withheld on the payment of dividends (to be distinguished from income taxes imposed on the earnings of a business). Taxes are also withheld by the payor on interest and preferred dividends but both interest and preferred dividends are reported to BEA on a net basis and, therefore, our data on withholding taxes relate only to those on common stock dividends.

4. Reinvested earnings (line D): The foreign parents' share in the net earnings of their U.S. corporations less gross dividends (before withholding taxes) on common stock.

5. Interest (line E): The net interest received on intercompany accounts or on long-term debt of foreign owned U.S. affiliates held by the parent or other nonbank foreign investors plus preferred dividends—all after deduction of any U.S. withholding taxes. Interest is included in income as a balance of payments flow item.

6. Royalties and fees (line F): Net payments by U.S. affiliates to foreign direct investors (after withholding taxes) for the use of tangible property, intangible property or rights (patents, techniques, trademarks, copyrights, etc.), and for professional, administrative, and management services.

on an accrual basis in both the budget and the NIA—are generally recorded in the budget at the time the checks are issued. The NIA records taxes paid by business in the time period in which the income is earned rather than at the time the taxes are paid. Personal income taxes are recorded at the time of payment. NIA receipts in 1974 exceed cash collections by $1.7 billion.

The principal timing adjustment on the expenditure side is for purchases of goods and services. In the NIA, purchases from the private sector are recorded mainly at the time of delivery to the Government. In 1974, deliveries exceed checks issued by $0.3 billion.

Land transactions and miscellaneous adjustments

All purchases and sales of land are excluded from the Federal sector of the NIA. The NIA also excludes receipts from the sale of oil leases which offset expenditures in the unified budget. The sum of these items add $1.9 billion to NIA expenditures in 1974.

There are a number of other differences between the two concepts, including certain foreign currency transactions, capital gains, other smaller timing adjustments, and several other items of lesser importance.